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AUTHOR Berney, Tomi D.; Adelman, Miriam
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ABSTRACT

The Bilingual Resources for Development of Gainful Employment skills (Project BRIDGES) was a federally-funded program in its second year of a 3-year funding cycle. Project BRIDGES aimed at developing the academic and vocational skills of limited-English-proficient (LEP) students who had failed two or more classes and were at risk of dropping out. Students were selected for the program on the basis of low scores on the Language Assessment Battery (LAB). Students received instruction in English as a Second Language (ESL), native language arts, and bilingual or ESL content-area instruction in mathematics, science, and social studies. The project also provided support services, curriculum and staff development, and parental-involvement activities. Students achieved the ESL objective, as well as the objectives of business and vocational courses by making gains on the LAB and on teacher-made tests. They partially achieved the objective for content area classes (in science and social studies, but not in mathematics), and the project met its attendance rate objective. The number of students served by the program increased to 456 from 346 in the previous year. Program strengths included the opportunity provided to at-risk LEP students for gaining employment skills, the high level of coordination among the three sites, and the project's special counseling services. The program's one drawback was a lack of parental-involvement activities. Suggestions for improvement include more homogeneous grouping in language classes, especially at the beginning levels where students are unable to work independently. (Author/MSE)

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OREA Report

EVALUATION SECTION REPORT

BILINGUAL RESOURCE INSTRUCTION
FOR DEVELOPMENT OF GAINFUL EMPLOYMENT SKILLS
PROJECT BRIDGES
1987-88

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EVALUATION SECTION
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June 1989

EVALUATION SECTION REPORT

BILINGUAL RESOURCE INSTRUCTION FOR DEVELOPMENT OF GAINFUL EMPLOYMENT SKILLS PROJECT BRIDGES 1987-88

Prepared by
The Bilingual Education Evaluation Unit
Tomi D. Berney, Unit Manager
Miriam Adelman, Evaluation Consultant

New York City Public Schools
Office of Research, Evaluation, Assessment
Robert Tobias, Director

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5/22/89

BILINGUAL RESOURCE INSTRUCTION FOR
DEVELOPMENT OF GAINFUL EMPLOYMENT SKILLS
(PROJECT BRIDGES)*
1987-88

SUMMARY

- Project BRIDGES was fully implemented. Students received instruction in English as a Second Language (E.S.L.), Native Language Arts (N.L.A.), content area subjects, and business and vocational subjects.

- Students achieved the project objectives in E.S.L., business and vocational subjects, and attendance. They partially achieved the objective for content area classes (they achieved it in science and social studies but not in mathematics).

Bilingual Resource Instruction for Development of Gainful Employment Skills (Project BRIDGES) was an Elementary and Secondary Education Act (E.S.E.A.) Title VII-funded program in its second year of a three-year funding cycle. During 1987-88 the project aimed at developing academic and vocational skills of limited English proficient (LEP) students who had failed two or more classes and were considered to be at risk of dropping out.

Students received instruction in E.S.L., N.L.A., and bilingual or E.S.L. content area classes in mathematics, science, and social studies. The project also provided support services, curriculum and staff development, and parental-involvement activities. Students were selected for the program based on scores below the twenty-first percentile on the Language Assessment Battery (LAB). In addition, students had to be overage for their grade level, had to have failed two or more courses, and had to have been deemed to be at risk of dropping out.

Students achieved the E.S.L. objective by making significant gains on the LAB and on teacher-made tests. They also achieved the objectives for N.L.A. and vocational and business subjects. Over 70 percent scored above the passing criterion of 65 in N.L.A. and business and vocational courses. The project met its attendance rate objective; program students attendance was significantly higher than that of mainstream students. Students partially met the content area objective by scoring above the criterion in science and social studies but

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*This summary is based on the final evaluation of the "Bilingual Resource Instruction for Development of Gainful Employment Skills (Project BRIDGES) 1987-88" prepared by the OREA Bilingual Education Evaluation Unit.

not in mathematics. It was not possible to assess the objective relating to dropout rate because of the lack of data.

The number of students served by the project increased to 456 in 1987-88 from 346 in 1986-87. This year the students met the proposed objective for science; they had failed to do so in the previous year. The project revised the objective for business and vocational subjects for this year.

Strengths of Project BRIDGES included the opportunity provided to at-risk LEP students to gain employment skills, the high level of coordination among the three sites, and the project's special counseling services. The one limitation of the program was its lack of parental-involvement activities.

The conclusion, based on the findings of this evaluation, lead to the following recommendation:

- Try to group more homogeneously in the N.L.A. and E.S.L. classes. This is particularly important at the beginning levels, where students are unable to work independently.

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I. INTRODUCTION

PROJECT DESCRIPTION

During its second year of funding under Title VII of the Elementary and Secondary Education Act (E.S.E.A.), Bilingual Resource Instruction for the Development of Gainful Employment Skills (Project BRIDGES) provided instructional and supportive services to approximately 460 at-risk students of limited English proficiency (LEP) at three Brooklyn high schools: South Shore, Sheepshead Bay, and Franklin D. Roosevelt (F.D.R.).

Project BRIDGES sought to improve English language ability and to develop the academic and vocational skills of recently arrived LEP students who previously had failed two or more classes and consequently were deemed to be at risk of dropping out. The students were from the Caribbean, Central and South America, Asia, and the Middle East.

Students received instruction in English as a second language (E.S.L.); native language arts (N.L.A.) where available; and mathematics, science, and social studies taught bilingually or in an E.S.L. format. Project students also enrolled in mainstream courses in computer science, art, music, physical education, and business and vocational subjects. Supportive services (guidance, counseling, and tutoring), curriculum development, staff development, and parental-involvement activities supplemented classroom instruction.

Participation in the project gave at-risk LEP students an opportunity to acquire useful employment skills, to receive the extra attention they needed to succeed without having to be

placed in special education, and to move gradually into mainstream classes.

SETTING

All three participating schools are located in Brooklyn neighborhoods with growing numbers of new immigrants and are experiencing rapid growth in their LEP enrollments. South Shore High School, in Canarsie, is the project's central site. A bright, cheerful and well-kept room housed the BRIDGES project. Academic and career counseling took place in an outer office, while the project director used his office for personal counseling. Students continually visited the BRIDGES office, and the staff members working there always welcomed them.

At Sheepshead Bay High School, the project office was located temporarily in a very large room. BRIDGES shared this space with Project PROBE. The office had ample room for books, supplies, and reference materials as well as for counseling and tutoring. It is possible that the project will lose this space next year.

F.D.R. is located in Bensonhurst. BRIDGES staff members worked in an office that they shared with other members of the E.S.L./foreign language department. There was room for desks and supplies, as well as for counseling and tutoring.

All three site offices had an "open-door" policy, and the evaluator observed students visiting each one throughout the school day for counseling, tutoring, or just to say hello.

PARTICIPATING STUDENTS

The major criterion for project selection was a score below the twenty-first percentile on the English version of the Language Assessment Battery (LAB).* Other criteria were that students were overage for their grade level, had failed two or more courses, and were deemed to be at risk of dropping out. As students entered school throughout the year Project BRIDGES staff evaluated them for eligibility for the project.

Many recent arrivals from Haiti, Central America, and Southeast Asia had serious academic deficiencies because only primary education had been compulsory and accessible to them. In addition, many students had been separated from their families before or after immigrating to this country. Some students' families were unstable due to economic and other problems; and some students had to work to help support their families, which gave them little time for study. For many BRIDGES students, academic, financial, and domestic difficulties exacerbated the challenges of adapting to a new culture.

Of the 3,173 students enrolled in South Shore High School, 135 were classified as LEP. The most widely spoken native languages were Haitian Creole, Hebrew, Chinese, and Spanish.

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*The Language Assessment Battery (LAB) was developed by the Board of Education of the City of New York to measure the English-language proficiency of nonnative speakers of English in order to determine whether their level of English proficiency is sufficient to enable them to participate effectively in classes taught in English. Students scoring below the twenty-first percentile on the LAB are entitled to bilingual and E.S.L. services.

Other languages included Turkish, Japanese, Vietnamese, Hungarian, and Italian.

Of the 2,997 students enrolled in Sheepshead Bay High School, 210 were LEP. Their native languages were: Chinese, Haitian Creole, Spanish, Russian, and other European and Asian languages.

F.D.R. had an enrollment of 600 LEP students in 1987-88. The most widely represented native languages were Chinese, Spanish, Haitian Creole, and Russian.

Overall, BRIDGES served 459 students. The majority (36 percent) were born in Haiti; 21 percent were born in Spanish-speaking countries from the Caribbean, and Central and South America; 10 percent were born in Israel; 11 percent were born in Hong Kong and the People's Republic of China; five percent were born in Taiwan; and the rest were born in other European, Middle Eastern or Asian countries.

The 398 students for whom age and grade data were available were fairly evenly distributed among the four high school grade levels. (See Table 1.) Fifty-four percent of the students were overage for their grade placement.

Project students averaged 7.7 years of education in their native countries. The students' years of education in the United States reflected a newly arrived population: the mean was 2.8 and the mode or most frequent value was two years.

Data on time in the program was available for 394 students; 139 (35 percent) had been in the program for one year, and the

TABLE 1

Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
14	12				12
15	36	17	1		54
16	24	35	17		76
17	14	42	38	9	103
18	5	18	27	18	68
19	1	14	19	13	47
20		7	14	11	32
21		2	2	2	6
TOTAL	92	135	118	53	398*

*Data were missing for 61 students.

All BRIDGES Students

Overage Students					
Number	44	83	62	26	215
Percent	47.8	61.5	52.5	49.1	54.0

Sheepshead Bay High School

Overage Students					
Number	12	13	18	5	48
Percent	33.3	40.6	47.4	35.7	40.0

Franklin D. Roosevelt High School

Overage Students					
Number	20	52	26	1	99
Percent	60.6	78.8	60.5	25.0	67.8

South Shore High School

Overage Students					
Number	12	18	18	20	68
Percent	52.2	48.6	48.6	57.1	51.5

- The majority of Project BRIDGES students were in the tenth grade.
- Fifty-four percent of program students were overage for their grade.

rest had been in the program for two years.

STAFF

BRIDGES' staff consisted of the project director, a site coordinator/grade advisor, a paraprofessional, and an administrative assistant, all located at South Shore High School; and site coordinators at F.D.R. and Sheepshead Bay.

Project BRIDGES operated under Brooklyn's Superintendent of Schools. In her capacity as the Superintendent's representative, the principal of South Shore High School supervised BRIDGES' project director. The project director in turn supervised project staff located at South Shore. The BRIDGES coordinators at the other two sites were supervised jointly by the project director and the assistant principal (A.P.) for foreign languages at each school. The site coordinators reported no conflicts between their departmental duties and their Title VII responsibilities.

The project director held a master's degree and an advanced certificate in educational administration. He had five years' experience as coordinator of E.S.L./bilingual instruction at South Shore High School. He was fluent in Spanish and Hebrew as well as in English.

The project director's duties included designing and implementing program activities, supervising project personnel, and since he was a certified bilingual school psychologist, he also counseled project students.

Working under the project director's supervision, the site coordinators administered project activities at each participating school, provided support services to tax-levy classroom teachers, and served as advisors and counselors to project students. The site coordinator/grade advisor at South Shore held a master's degree in guidance, and had 15 years' experience in E.S.L. and foreign language instruction. She was a native speaker of French.

The site coordinator at F.D.R. held a master's degree and was an experienced bilingual and foreign language teacher. He taught Spanish N.L.A., was a native speaker of Italian, and was fluent in Spanish.

The site coordinator at Sheepshead Bay held a master's degree and was an experienced E.S.L. teacher. Her linguistic abilities included French as well as Spanish. In addition to her activities as Project BRIDGES' site coordinator, she also taught E.S.L.

Paraprofessional staff at the different sites worked with the rest of the BRIDGES staff on project-related activities and services, which included translating for students and their parents, assisting teachers in the classroom, and working with students on a pull-out basis.

Staff at all three sites said they participated in staff development activities held by their respective departments. At all three sites, BRIDGES staff also met with mainstream teachers

to discuss the special needs and problems of foreign and LEP students.

II. EVALUATION FINDINGS: INSTRUCTIONAL ACTIVITIES

The Office of Research, Evaluation, and Assessment (OREA) evaluated Project BRIDGES by inspecting student test results and program records, interviewing school and project personnel, and observing classes. The project proposed instructional objectives in E.S.L., N.L.A., content area subjects, and business and vocational subjects.

ENGLISH AS A SECOND LANGUAGE

- As a result of participating in the program, E.S.L. students will make statistically significant gains in English language proficiency.
- As a result of participating in the program, English-proficient students will show significant gains in English reading achievement.

Implementation. Every BRIDGES site offered E.S.L. reading and writing courses at beginning, intermediate, and advanced levels. Beginning level students received three periods of E.S.L. instruction per day. Intermediate, advanced, and transitional level students received two periods of E.S.L. per day.

Sheepshead Bay also had a special "pre-elementary" class for students who urgently needed to acquire rudimentary English skills. The same school modified the intermediate-level class so that students could complete two periods' worth of work in a single period, thereby giving them an additional period to study

other subjects. All three sites provided paraprofessional and/or peer tutoring to supplement E.S.L. classes.

An OREA field consultant observed E.S.L. classes at all levels of instruction. All of the classes contained a mix of Asian, Latin American, Haitian, Russian, and Middle Eastern students, and all were conducted entirely in English.

The OREA field consultant observed a beginning-level E.S.L. class of 25 at F.D.R. The aim of the lesson was to learn to use "always," "usually," "sometimes," "never," and "rarely." Students took turns asking and answering the questions "What time do you usually get up/eat breakfast/eat lunch?" Since the class was large and contained students at several skill levels, the teacher paired slower students with more advanced ones. The teacher continually tried to draw shyer students into the activity. She also firmly disciplined several students who became unruly.

The OREA consultant observed an intermediate level E.S.L. class of 14 at South Shore High School. The aim of the lesson was to learn how to use comparative adjectives. The teacher introduced the lesson by asking four students to stand at the front of the room and then asked the rest of the class to indicate whether each student was taller or shorter than the one next to her/him. The teacher then showed pairs of books to her students and asked them to indicate which book was thicker and which was thinner. The students responded eagerly. Next, the teacher asked a student to write the comparative forms of a short

list of adjectives on the board. Finally, she distributed a handout that required students to supply the comparative form of various adjectives.

A field consultant observed an E.S.L. tutoring session at Sheepshead Bay. A paraprofessional was working with three pre-beginners, all very recent arrivals. One was a Haitian Creole speaker and two were Arabic speakers. All three were using a picture book containing a simple story. After leading the three students in choral reading, the paraprofessional called upon them to read aloud individually. They went through a series of animal pictures, and the paraprofessional asked each student to describe what the different animals were doing. This was followed by a writing (copying) exercise. It was obvious that the students were trying hard to learn to read and write English. The paraprofessional explained that she had been working with one of student for six weeks, while the other two had only recently arrived. Their rate of progress, she said, would determine when they would be integrated into a beginning-level class.

Outcomes. To assess students' achievement in English reading, the OREA data analyst computed correlated *t*-test on students' LAB N.C.E. scores.* The *t*-test determined whether the difference between pretest and posttest mean scores was

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*Raw scores were converted to N.C.E. scores, which are normalized standard scores. They have the advantage of forming an equal interval scale so that scores and gains can be averaged. For the norming population, N.C.E.s have a mean of 50, a standard deviation of approximately 20, and a range from one to 99. Scores can be compared to the norming population.

significantly greater than would be expected from chance variation alone.

Complete pretest and posttest N.C.E. scores were available for 234 students. N.C.E. gains for students in all grades were statistically significant ($p < .05$). (See Table 2.) The mean gain was seven N.C.E.s (s.d.= 9.4). Similarly, all participating schools showed significant N.C.E. gains. (See Table 3.) The overall effect size (.73) was medium, indicating a moderate degree of educational meaninfulness.* Project BRIDGES met its E.S.L. objectives, as measured by analysis of LAB pre- and posttest scores.

OREA also used the results of teacher-made tests in E.S.L. classes to assess students' progress. The overall results, presented in Table 4, show that for both E.S.L. and mainstream English just under 70 percent of the students passed in the fall and over 70 percent passed in the spring.

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*The effect size, developed by Jacob Cohen, is a ratio of the mean gain to the standard deviation of the gain. This ratio provides an index of improvement in standard deviation units irrespective of the size of the sample. Effect size (E.S.) is interpreted to indicate educational meaningfulness, and an E.S. of .80 is thought to be highly meaningful, while one of .20 is considered to be only slightly so.

TABLE 2

Pretest/Posttest N.C.E. Differences on
the Language Assessment Battery, by Grade

Grade	Number of Students	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Difference Mean	Difference S.D.	t Value	Effect Size
9	58	14.2	11.7	21.5	15.8	7.3	10.7	5.22*	.68
10	83	12.7	8.7	19.3	11.2	6.6	7.6	7.97*	.87
11	64	14.9	8.5	21.5	12.4	6.6	9.9	5.27*	.66
12	27	17.7	7.3	24.7	13.1	7.0	10.2	3.58*	.69
TOTAL	234"	14.3	9.4	21.1	13.0	6.9	9.4	11.23*	.73

*p < .05

"Total includes two students for whom grade level information was missing.

- There were significant pretest/posttest differences at every grade level and for the group as a whole.

TABLE 3

Pretest/Posttest N.C.E. Differences on the Language Assessment Battery, by Site

School	Number of Students	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Difference Mean	Difference S.D.	t Value	Effect Size
Sheepshead Bay	75	16.3	8.9	22.8	12.2	6.5	8.6	6.45*	.74
F.D. Roosevelt	75	11.2	8.9	17.1	11.4	5.9	6.9	7.45*	.86
South Shore	84	15.1	9.6	23.3	14.3	8.2	11.7	6.42*	.70
TOTAL	234	14.3	9.4	21.1	13.0	6.8	9.4	11.23*	.73

*$p < .05$

- Pretest/posttest gains were significant for each school.
- Students at South Shore High School showed the greatest differences in N.C.E.s between pretest and posttest.

TABLE 4

Passing Rates in E.S.L./English Courses

School	E.S.L.				ENGLISH			
	Fall		Spring		Fall		Spring	
	Number of Students	Percent Passing	Number of Students	Percent Passing	Number of Students	Percent Passing	Number of Students	Percent Passing
Sheepshead Bay	102	78.4	101	81.2	106	92.5	94	78.7
F.D. Roosevelt	133	48.9	108	52.8	129	48.8	95	60.0
South Shore	114	82.5	115	92.2	4	75.0	12	100.0
TOTAL	349	68.5	324	75.6	239	68.6	201	71.1

- Overall, the passing rate for E.S.L. and English courses was over 70 percent.

NATIVE LANGUAGE ARTS

- At least 70 percent of the students enrolled in native language instruction will score at or above the 65 percent passing criterion.

Implementation. Haitian students at South Shore and Sheepshead Bay received five periods per week of N.L.A. instruction. Monday through Thursday classes were devoted to French, while the Friday class focused on Haitian Creole language and literature. Sheepshead Bay offered N.L.A. classes in French and Spanish. F.D.R. offered three levels of N.L.A. classes in Spanish, French, Haitian Creole, and Chinese. Project BRIDGES students received language credit for work done in their native countries; staff members were responsible for evaluating their records and determining how much credit should be given.

A field consultant observed a mixed-level Spanish N.L.A. class of 19 at Sheepshead Bay High School. The aim of the lesson was to develop proficiency in reading by discussing a Mexican legend from the textbook. The class began by discussing vocabulary from the reading. The teacher asked the students to define difficult words themselves, providing his own definitions only when the students were unable to do so. The class then told the story in their own words, with the teacher asking questions. Most of the students volunteered to answer the teacher's questions.

A field consultant also observed a mixed-level French N.L.A. class of 31. The aim was to use the subjunctive tense. The class began with the teacher calling on students to go to the

board to write the correct verb form in previously written sentences. The class then read aloud a story from the text. Many students participated in a discussion of the difficult words from the reading selection. The teacher said that since the class was grouped heterogeneously he found it difficult to accommodate their needs, and he hoped it would be possible to group students homogeneously in the future.

Outcomes. OREA used teacher-made tests to evaluate student achievement in this area. It was clear that Project BRIDGES met its N.L.A. objective since over 80 percent of the students passed their N.L.A. courses. (See Table 5.) Performance varied by site.

CONTENT AREA SUBJECTS

- At least 70 percent of the students will score at or above the passing criterion in subject area classes each semester.

Implementation. Each site offered content area classes in a bilingual and/or an E.S.L. format. A school could offer bilingual content area classes when there was a large number of speakers of a given native language and a qualified bilingual content area teacher was available. Bilingual and E.S.L. content area courses paralleled mainstream ones. Bilingual and E.S.L. format courses were generally at the beginning of a course sequence; it was assumed that students would be mainstreamed by the time they were ready to take the advanced-level classes.

TABLE 5

Passing Rates in Native Language Arts Courses

School	Fall		Spring	
	Number of Students	Percent Passing	Number of Students	Percent Passing
Sheepshead Bay	34	88.2	33	84.8
F. D. Roosevelt	a	a	58	72.4
South Shore	38	86.8	42	88.1
TOTAL	72	87.5	133	80.5

[a]Data were not available.

- Passing rates were higher than 70 percent at all program sites.

South Shore High School offered bilingual (French/Haitian Creole) physical science, global studies, and mathematics fundamentals. The health education, history, physical science, and mathematics courses had an E.S.L. format.

Chinese and Haitian students at Sheepshead Bay could enroll in bilingual mathematics and global studies classes, while LEP students with other native languages took science, social studies, health education, and typing classes taught with an E.S.L. format.

F.D.R. offered a wide variety of courses in an E.S.L. format: economics, general science, social studies, mathematics, biology, chemistry, global studies, typing, U.S. history, and U.S. government. F.D.R. also offered bilingual classes (Spanish and Chinese) in mathematics, general science, biology, global studies, economics, U.S. history, and U.S. government.

An OREA field consultant observed an E.S.L. format global studies class of 17 at Sheepshead Bay High School. The objective was to review a test on feudalism and the rights of Englishmen. The teacher stopped frequently to define, discuss, provide synonyms, and make sentences using difficult terms. After reviewing the test, the teacher asked the class to compare the status of the individual in feudal society with that in modern society. For example, he asked, "How would you feel if you knew you had to be just what your parents were?" Many students responded eagerly, and seemed to be developing the fluency in English needed to express complicated ideas.

A field consultant observed a bilingual U.S. history and government class for Spanish speakers. It was a very large class, 30 students from many different Latin American countries. The aim of the lesson was to compare different political and socioeconomic systems. The first part of the lesson consisted of matching political systems--fascism, monarchy and democracy--with their most likely socioeconomic counterparts--capitalism, socialism, and communism. The teacher then asked his students to discuss why people accept subordination or dictatorship. The students seemed excited, and the discussion animated. For the second part of the lesson, the teacher divided the class into different "political factions" and had each one answer the following questions: "What would the position of women be in your system?", "Under what system would a child have a better life?", "Which of these systems would be better for Latin America today?". The observer was impressed by the students' enthusiasm. The class was conducted mostly in Spanish. Afterwards, the teacher explained that they had designated that day of the week as "Spanish language day."

Outcomes. Overall, students achieved the proposed 70 percent passing rate in science and social studies. (See Table 6.) Less than 70 percent of the students passed their mathematics courses. At F.D.R. the passing rate in any of the three content areas was never as high as 70 percent.

TABLE 6

Passing Rates in Content Area Subjects

School	Content Area	Fall		Spring	
		Number of Students	Percent Passing	Number of Students	Percent Passing
Sheepshead Bay	Mathematics	93	68.8	86	64.0
	Science	72	76.4	38	97.4
	Social Studies	102	86.3	71	90.1
F.D. Roosevelt	Mathematics	132	41.7	91	59.3
	Science	a	a	85	63.5
	Social Studies	a	a	103	52.4
South Shore	Mathematics	102	67.6	99	63.6
	Science	94	73.4	70	82.9
	Social Studies	95	82.1	93	95.7
TOTAL	Mathematics	327	57.5	276	62.3
	Science	166	74.7	193	77.2
	Social Studies	197	84.3	267	77.5

[a]Data were not available.

In Sheepshead Bay and in South Shore high schools, the passing rates in science and social studies were always over 70 percent.

BUSINESS AND VOCATIONAL SUBJECTS

- At least 70 percent of the students enrolled in vocational education courses will score at or above the 65 percent passing criterion.

Implementation. Each school offered a full range of business education and industrial arts courses in English. These included computer literacy, typing, office machines, accounting, keyboarding, auto mechanics, wood shop, metal shop, and drafting.

Outcomes. Overall, at least 70 percent of the students reached the passing criterion in business and vocational courses. (See Table 7.) However, performance varied by site. Project BRIDGES met its objective in business and vocational courses.

TABLE 7

Passing Rates for Program Students
in Business and Vocational Courses

School	Fall		Spring	
	Number of Students	Percent Passing	Number of Students	Percent Passing
Sheepshead Bay	23	65.2	27	96.3
F. D. Roosevelt	36	63.9	37	45.9
South Shore	41	82.9	52	84.6
TOTAL	100	72.0	116	75.0

- The overall passing rates for business and vocational courses were over 70 percent.

III. EVALUATION FINDINGS: NONINSTRUCTIONAL ACTIVITIES

The project proposed noninstructional objectives in attendance, staff development, and parental involvement.

ATTENDANCE AND DROPOUT RATE

- As a result of participating in the program, students' attendance will be higher than that of mainstream students.
- Program students will have a lower dropout rate than similar non-program students.

To prevent student attrition and promote better attendance, the project's noninstructional component incorporated a number of supportive strategies, including academic guidance, personal counseling, career education, tutoring, and extracurricular activities.

Implementation

Guidance and Counseling. A single guidance counselor served all of F.D.R.'s LEP students. The situation was similar at Sheepshead Bay, where one counselor and the BRIDGES site coordinator provided support services for all project students. The situation at South Shore was somewhat better, with a project staff member who also was a grade advisor providing academic advisement. The project director, in his capacity as bilingual school psychologist, also provided counseling. At all three sites, if no staff members spoke a student's native language, peers from mainstream classes were called upon to translate.

Project personnel at each site employed a variety of methods to help project students overcome adjustment difficulties. South Shore established a "big brother/big sister" program that paired incoming students with those who had attended South Shore for one or more years. F.D.R. had a "buddy system" in which students already enrolled in the project helped orient new students. At Sheepshead Bay, the Haitian teacher frequently phoned students' families and, when necessary, made home visits to discuss academic or discipline problems.

According to the project director, Project BRIDGES students received more counseling and more guidance services than did students in the mainstream. Staff members said that in its second year the project had succeeded in forging effective linkages between its own guidance and counseling component and the relevant schoolwide services, e.g., with the attendance office.

Career Education. BRIDGES provided career counseling through classroom activities and various special events. For example, F.D.R.'s E.S.L. component incorporated a faculty-developed career handbook. In addition, BRIDGES students from all three sites participated in the Annual Bilingual Career Day at Kingsborough Community College.

Tutoring. BRIDGES staff members tutored students on an as-needed basis; paraprofessionals provided individual and small group tutoring, and eleventh- and twelfth-graders provided peer

tutoring to ninth- and tenth-graders of the same sex and ethnic background.

The project director was working on a tutoring program involving Brooklyn College mathematics and science students. Scheduled to begi n September 1988, the program was to have two components: direct tutoring of program students by Brooklyn College students, and Brooklyn College students training high school seniors to tutor program students.

Extracurricular Activities. Project BRIDGES had two student publications, an English magazine, Stepping Stone, and a Haitian/Creole/French magazine, Soleyl. Both appeared twice a year and contained student essays, artwork, and project news.

In May, project staff and students at South Shore organized an exhibition of Haitian art. They also participated in the Group Relations Improvement Program (GRIP), a task force devoted to better intergroup relations at the school. The task force sponsored an international dinner at the end of the school year, and all bilingual students and their parents were encouraged to attend.

Outcome

Since the schools' attendance rates includes program students, statistical significance of the difference between one proportion was determined through the application of a z-test.*

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*Bruning, J.L. and Kintz, B.L.; Computational Handbook of Statistics (Glenview, Illinois: Scott Foresman, and Company, 1968).

The z-test is used to determine whether the difference between one proportion (the program attendance rate) and a standard proportion (the school attendance rate) is greater than can be expected by chance variation.

Table 8 presents the attendance rate of program and mainstream students by site. Examination of the table indicates that the attendance rates for program students at all sites were higher than the schoolwide rates. Thus the Project BRIDGES achieved the objective that program students' attendance would be higher than that of mainstream students.

According to data supplied by the program, six students dropped out during the spring semester and three during the fall. The project did not supply comparable data for mainstream students. It was therefore impossible to evaluate the program's dropout objective.

TABLE 8

Attendance Rate for Program and Mainstream Students

School	Program Students				Mainstream Students
	Fall		Spring		
	Number of Students	Rate	Number of Students	Rate	Yearly Attendance Rate
Sheepshead Bay	105	92.5	102	91.0	86.51
F.D. Roosevelt	77	96.9	79	95.1	81.46
South Shore	117	93.0	126	93.7	82.28
TOTAL	299	93.8	307	93.2	----

- At every site Project BRIDGES students' attendance rates were higher than that of mainstream students.

IV. CONCLUSIONS AND RECOMMENDATIONS

Project BRIDGES met its E.S.L., N.L.A., and business and vocational subjects objectives. It achieved the science and social studies part of the content area objective and it met the attendance objective. OREA was unable to evaluate the dropout objective because of lack of data. The project did not meet the mathematics part of the content area objective.

Project BRIDGES provided invaluable support to at-risk LEP students. Teaching and nonteaching staff provided educational opportunities for students. The project's special guidance and counseling services eased the difficult process of acculturation for many students and encouraged them to remain in school. All of the project staff members who were interviewed agreed that counseling was a key to the success of BRIDGES and similar programs.

The opportunity to take N.L.A. and bilingual and/or E.S.L.-format content area courses while they learned enough English to be mainstreamed appeared to be essential to the students' academic development.

The conclusions, based on the findings of this evaluation, lead to the following recommendation:

- Try to group more homogeneously in the N.L.A. and E.S.L. classes. This is particularly important at the beginning levels, where students are unable to work independently.